Appl.No.: 09/493,526

Amendment dated June 4, 2004

Response to Office Action of March 8, 2004

Amendments to the Specification:

Page 1, first line, amend the title:

for a description of the conventional algorithm).

Method For Combating Ingress And Impulse Noise
Using Upstream CATV Coded Modulation

Page 6, amend the last paragraph (bridging to page 7):

Next, envolution convolution decoding (Viterbi Algorithm Unit) is performed; the unit implements a method which is exactly identical to the well known 64 states Viterbi algorithm for soft decoding of convolutionally encoded BPSK (or QPSK) signal, except for a single difference: It uses the approximated scores calculated by the score calculation unit, rather than the conventional scores (which are the squared distances from the "0" and "1" levels of the binary signal). These methods implement 128 branches per bit for rate ½ code, and possibly less than that for punctured codes. There are several low cost IC's that implement such methods for data rates of more than 30 million information bits per second (e.g. DBS receivers). The cost of these IC's also includes A/D conversion, re-sampling, filtering, acquisition, de-interleaving, and Reed-Solomon decoding is below \$10, and their power consumption is in the range of 1W or below. (See e.g., "Digital Communications", J.G. Proakis, 3rd Edition, McGraw Hill, 1995, pp. 483-486

